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THE SALT MARSH YELLOWTHROATS OF SAN FRANCISCO

By GEORGE W. SCHUSSLER

TO THOSE who go afield from San Francisco during the first glorious days in early spring when the warmth shimmers low over the land and the birds are bursting into song, the open country surrounding the Laguna de la Merced in the southwestern section of the city yields a peculiar charm; for it is here, within scarcely an hour's ride of the metropolis, that one may find "a pleasure in the pathless woods", or pausing by the willow-bordered lakes, listen to the cackling of innumerable coots, to the whirring of ducks, and occasionally, on never-to-be-forgotten days, to the wild far away shouting of the loon. And here, too, mingling with the hosts of singing linnets, gold-finches and song sparrows, or flitting about the fresh-water ponds may be found that interesting feathered anomaly, the Salt Marsh Yellowthroat (*Geothlypis trichas sinuosa*).*

The term "Salt Marsh" which has been applied to these birds is highly misleading and I cannot too heartily endorse the suggestion made by Messrs. Ray and Carriger that in future this sub-species be known as the San Francisco Yellowthroat. Its distribution was given in THE CONDOR, III, page 65, as "about the salt marshes of San Francisco Bay and vicinity;" yet not only is it found much more commonly in the neighborhood of fresh water throughout most of this region, but even in areas directly adjacent to the lower bay where salty flats largely predominate it shows marked preference for the reaches of non-saline streams. Indeed on numerous excursions along the brackish sloughs near San Mateo I have found this yellowthroat to be exceedingly scarce, though upon approaching that portion of fresh-water seepage land lying a few miles to the westward, it again becomes decidedly common and nests there abundantly.

About Lake Merced it is evenly distributed and is resident the year around, although much less in evidence during the winter months. In the short dark days of December a walk about the dreary swampland of the old rancho will often disclose the small olive-drab figure of *sinuosa* flitting out of sight far in advance of your approach, while the wind bears down to you its solitary *chack* of protest and suspicion. At this season these birds are more often heard than seen. They apparently forsake in greater part the boggy meadows where they dwelt in summer and keep to the seclusion of the high tules standing in deep water; but with the gradual approach of spring their incursions into the shorter grasses and out among the willows become more and more frequent, until by early February the yellow breasts and masked faces of a solitary pair may be met with, like the outposts of an army, high up among the lupine bushes on the dry hillsides. The greater number, however, are content to remain close down beside the lakes in the old willowy haunts of the previous year. At this period I have once or twice heard them utter a short grating *k-r-r-r-r-r* in addition to their familiar *chack* of distrust.

It is usually not until some warm, sunny morning in late February that the clear ringing *wreech-ity, wreech-ity, wreech-ity, wreech-ity* of the male is heard. This song varies considerably with the season and individual, those in early spring often sounding sadly out of tune, and some are even rendered in a con-

*Specimens collected at Lake Merced, San Francisco County, by Mr. Henry W. Carriger, and by him deposited in the California Museum of Vertebrate Zoology, prove the identity of the race as above indicated.—EDITORS.

denser form of two syllables; but the power of it rises rapidly as the year advances until by the end of March its nuptial gladness pours forth in full-throated volume. Sometimes as evening approaches, one of the little black-faced birds will leap into the air with fluttering wings and expanded tail and as it slowly tumbles down into the grass again, will execute an exquisite series of melodious runs and trills not unlike the vocal accomplishments of the Chat.

The nesting period ranges from middle April until June, fresh eggs having been taken on April 2 and June 18. The yellowthroats, habitually suspicious, become doubly vigilant during the breeding season and I think that only twice in all the years I have studied them have I surprised the female in the act of carrying nesting material. It has been my experience that if an unfinished structure not containing eggs is located, the birds promptly abandon it. The nest, a cup-shaped, fairly compact receptacle is usually composed of lengths of dried grass well interwoven with the supporting stems. It is commonly hidden in bunches of wire grass or weeds among willows and placed from six to twenty-four inches above the ground. The bowl-like interior is often lined in rather a loose manner with dried grass or thin fiber. The usual complement is four though a set of three, particularly when laid late in the season, is not rare. The eggs are taperingly oval in shape, white, with a decided pink tinge when fresh, and circularly splotched about the larger end with dots and dashes of black, brown, and deep lavender, varying in size from minute markings on some specimens to a pronounced ring of color on others. Incubation, which is performed by the female, usually occupies about fourteen days.

There has occurred of recent years a serious factor which may possibly, if long continued, result in permanent changes in the nest-building of these birds. It has become a custom of the Italian truck gardeners who cultivate the upper hills of Merced to make frequent excursions down to the lakes to cut the tough wire grass in which *sinuosa* nests, in order to use it for binding vegetables, thus economizing in cord. For this purpose the grass is collected in enormous quantities, great swathes being opened through the thickest growths and in other places entire meadows being utterly denuded. As this destruction takes place during the time when eggs and young are in the nests, it is reasonable to conclude that numbers of these are annually destroyed. It has lately appeared to Mr. H. W. Carriger (and my observations would tend to confirm his conjecture), that as a result of this persecution the yellowthroats are nesting less abundantly in the grassy flats and adapting themselves more to life in the inaccessible tules of the open lake, or else building their homes higher up toward the banks amid thickets of blackberry and willow. Certainly the number of sets found in these localities is far greater now than in former years, and in time such safety zones may be used exclusively.

While incubating, the females often show remarkable shyness in slipping off the nest and keeping well ahead of the observer, with short undulating flight. Occasionally as evening approaches they are apt to flush from directly beneath one's feet, particularly should he beat quietly up toward them against the wind. When startled from her nest the female disappears and maintains silence for some moments but if the intruder remains in the vicinity, or removes the nest or eggs, her sharp *chack* of alarm will rapidly summon the male and the pair will flit nervously about in the underbrush, often fearlessly approaching within a few yards of the observer.

The young when hatched are naked, but gradually become sparsely covered with light down. Feeding, which is participated in by both parents, takes place at short intervals during the greater part of the day, until the young are ready to leave the nest. So far as I have been able to observe, the parent birds appear to entice the ambitious nestlings into the tule and willow thickets away from the open flats where they may have been hatched. This is probably in order to afford them the shelter of the branches and, by removing them some little distance from the ground, to protect them against small predatory mammals.

In September the summer songs of the males have ceased and a great diminution in their numbers is noticeable. By November, *sinuosa* has again largely retired to his tule jungle and with his added winter air of distrust is once more the shy flitting figure of the December marshlands.

San Francisco, November 9, 1917.

A RETURN TO THE DAKOTA LAKE REGION

By FLORENCE MERRIAM BAILEY

With one photo by Robert B. Rockwell

(Continued from page 37)

5. THE PHALAROPE SLOUGH

ANOTHER slough only a few rods from the farm house filled a level floored basin bounded by a low bench line. When the first settlers came, the slough was an overflow from the lakes, one could row from it to both the north and middle Sweetwaters, I was told; but now in dry years the entire slough could be mowed, as was attested by remains of fenced haystacks that made islands in the open water of the slough. The grass was the typical headed slough grass though not quite so high as that in the Big Slough, while its water was only about knee deep. The place had attracted me from the first because of the Redwings that nested there and the Sora Rails whose ringing ecstatic songs came from it. In looking for the invisible Sora, one day, I flushed a small timid Sparrow, presumably the Nelson, which sang a variety of songs with the emphasis on the first and second syllables—*chit'-tah-chitter; chat', chat, chat-ah-cha; chit', chat', chitter, chitter chit; or chit, chat, chittah, chittah, chittah*—and which gave a flash of buffy before he disappeared in the grass. When he had gone down and I had roused the worried interest of several pairs of Blackbirds, I had a great surprise.

The Redwings which were following me around in the slough were joined in air by two small waders, white from below and with sharp bony wing angles. Slender, long-winged, able-winged creatures of the air, with long legs projecting beyond their white fan tails, they were striking contrasts to the stocky Red-winged Blackbirds, so evidently creatures of the earth. Much smaller than the Upland Plover, with free open flight instead of the quick wing beats of *Bartramia*, and with a hoarse cry too large for their size, they puzzled me greatly; for it was hard to catch markings, they flew so high above my